

7. BREWING & FERMENTING  
MASHING.

A 3318-189

195. ALCOHOL.  
Mashing-  
Wort,  
Hopping.

16/1

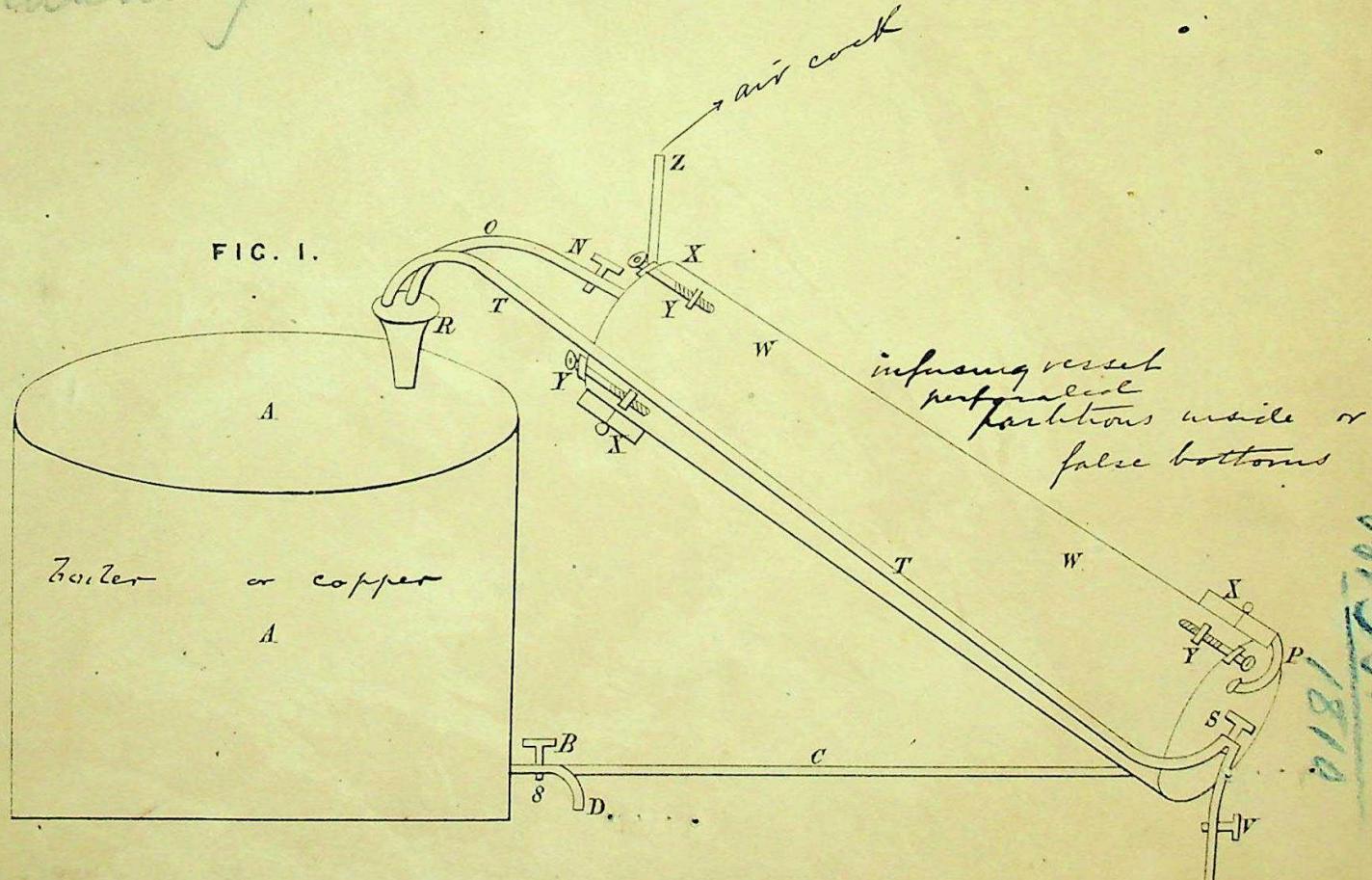
A.D. 1810. MAY 22. N° 3318.

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SHANNON'S SPECIFICATION.

Mashing

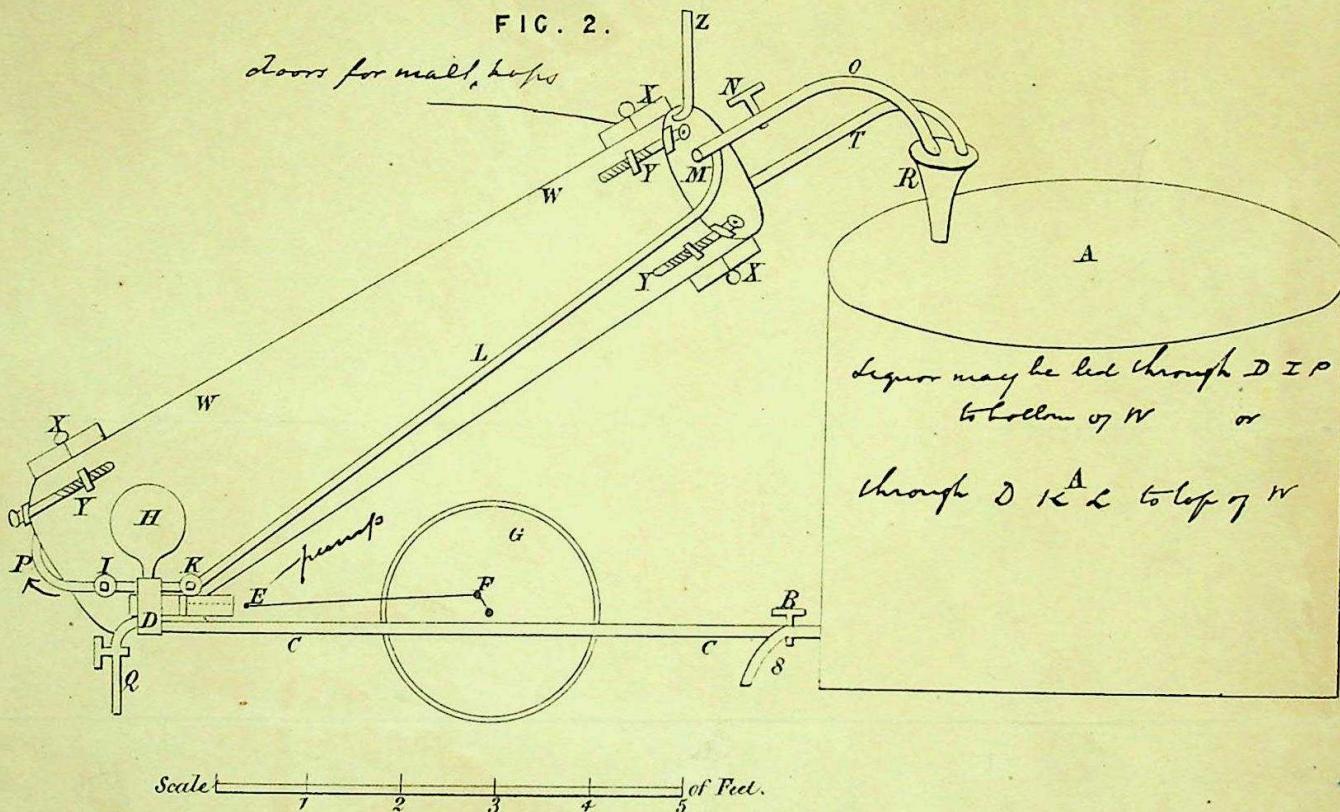
FIG. 1.



1818-189

work or liquor sent  
through malt or hops

B1861



The engraved drawing is not colored.

Drawn on Stone by Malby & Sons.

0181  
B1861

426/29

D BEVERAGES

CHOL.

1810

Wort.

30

Hopping

RECORDED

water was the mark

wards



A.D. 1810 . . . . . N° 3318.

### Brewing.

#### SHANNON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, MICHAEL SHANNON, of Berwick Street, in the Parish of Saint James, in the County of Middlesex, Architect, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, by 5 His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Twenty-second day of March, in the fiftieth year of His reign, give and grant unto me, the said Michael Shannon, my executors, administrators, and assigns, His especial licence, full power, sole privilege and authority, that I, the said Michael Shannon, my 10 executors, administrators, and assigns, during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, an Invention of "CERTAIN IMPROVEMENTS IN THE ART OF BREWING," which were made and communicated to me by a learned foreigner, deceased; in which said Letters Patent there is contained 15 a proviso, obliging me, the said Michael Shannon, by an instrument in writing under my hand and seal, to cause a particular description of the nature of the said Invention, and in what manner the same is to be performed, to be inrolled in His Majesty's High Court of Chancery within two calendar months after the date of the said recited Letters Patent, as in and by the same, relation 20 being thereunto had, may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Michael Shannon, do hereby declare that the nature of the said Invention, and

*Shannon's Improvements in the Art of Brewing.*

the manner in which the same is to be performed, are particularly described and ascertained as follows (that is to say) :—

In the annexed Drawings, Fig. 1 and Fig. 2, each sketch or outline denotes the same machinery or apparatus seen on different sides, and the parts thereof are indicated by letters of the alphabet, the same letter everywhere denoting 5 the same part or thing. A, A, is a boiler or copper, from the lower part of which a communication is made, through the cock B and pipe C, into D, a box or chamber, from which there are five communications (namely, firstly, through the cock Q, when it is required to be emptied ; and, secondly, through the cock I and pipe P to the bottom of the infusing vessel W, W ; and, thirdly, 10 through the cock K and pipe L to the top of the infusing vessel W, W, at M ; and, fourthly, with the pump E, worked by the first mover G, F ; and, fifthly, with the air vessel H, which keeps up a constant reaction, when required. At S is a cock, communicating from the bottom of the infusing vessel W, W, through V, for the purpose of drawing off its contents, and also through the 15 pipe T into the boiler through the mouth or funnel R. A like communication is made from the top of the infusing vessel, when required, through the pipe O. W, W, is an infusing vessel or receptacle, which, by preference, is constructed of a cylindrical form, but may be made of various other forms, which local convenience and the nature of the process will clearly indicate, and the 20 same may be made of wood, or of any other material fit for infusing malt therein. And the said vessel or receptacle is provided with two false bottoms, or perforated partitions within ; (that is to say,) one of the two near one end or extremity of the said vessel or receptacle, and the other near the other end or extremity thereof, for the purpose of allowing the liquor or worts to pass 25 more freely into and out of the same during the time of operating, and the dimensions of the said machinery, and of the parts thereof, with the relative positions of the same, may also be varied, as convenience may require. X, X, denote certain apertures or doors at which the malt or the other contents of the infusing vessel may be put in or taken out ; and Y, Y, denote certain screws 30 of fastenings, by means of which the said ends, caps, or closing pieces and applied and kept sufficiently liquor-tight in their places ; and Z denotes a stand pipe, which is open at top, and serves to allow the escape of air from the space or interstices between the malt or grain.

And I do declare that the process or manner of carrying the said Invention 35 into effect is as follows :—Malt is to be put into the infusing vessel W, W, which, in most cases, may be filled, or nearly filled, with the same, excepting the spaces between the false bottoms or perforated partitions and the end thereof ; and water is to be put in due quantity into the boiler or copper A, A,

*Shannon's Improvements in the Art of Brewing.*

and heat applied as usual to the same; as soon as the water has acquired the degree of heat proper for mashing, the cock B, which has two ways, one through the pipe C, and the other through the pipe S, (is to be turned, so as to convey the hot water through C into D, and the cocks Q 5 and K being shut, the cock I is then to be opened, and also the cock N; the consequence of this arrangement will be that the hot water will rise through the malt in W, W, to the level in the boiler, but it would not pass through if it were not for the pump E, which is at the same time to be worked by any adequate and convenient first mover at G, and draws 10 the water through a lower valve, and at its return stroke forces it through an upper valve, duly placed within the receptacle D on each side of the barrel thereof. By this action the hot water is forced gradually through the malt or grain in a constant stream, the air escaping wholly or in part through Z, which returns through the boiler by means of the cock and pipe 15 N and O, and by this means the wort is kept hot, and repeatedly passed through the grain until the strength of the malt is intirely extracted. And, moreover, whenever it may be found necessary or expedient to cause the water, liquor, or wort to pass down the infusing vessel W, W, instead of upwards, it will then be only necessary that the cocks K and S should be open, and the 20 cocks I and N shut, and under these circumstances the heated water will be forced up the pipe L, through M, and downwards through the vessel W, W, out of which it will pass through S and T into the boiler by a reverse operation, in which it will be needful to keep the cock I shut until the vessel W is filled, and liquor appears in Z.

25 And, lastly, I do declare that, by the said improvements, the wort may be made as strong as the proportions of materials will allow, and that the inconvenient and imperfect operation of mashing is avoided, and that the spent or exhausted grain may be afterwards drawn out with great facility and saving of labour, and that a like apparatus may be applied for passing the 30 wort through hops instead of boiling, in case the same should be preferred, either for purposes of œconomy, or giving a peculiar strength or difference of flavor to the liquor by this method of hopping.

In witness whereof, I, the said Michael Shannon, have hereunto set my hand and seal, this Fourteenth day of April, in the year of our Lord  
35 One thousand eight hundred and ten.

MICHAEL SHANNON. (L.S.)

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*Shannon's Improvements in the Art of Brewing.*

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STANLEY.  
AND BE IT REMEMBERED, that on the Fourteenth day of April, in the year of our Lord 1810, the aforesaid Michael Shannon came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampd according to the tenor of the 5 Statutes made for that purpose.

Inrolled the Eighteenth day of May, in the year of our Lord 1810.

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